



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,971	06/26/2003	Michael A. Pate	200207145-1	7427

7590 09/27/2006  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

CASCHERA, ANTONIO A

ART UNIT PAPER NUMBER

2628

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/608,971	PATE, MICHAEL A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Antonio A. Caschera	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 is/are allowed.
- 6) ☒ Claim(s) 20-22 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 23-37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 20-22 and 38-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Clark (U.S. Pub 2004/0140981 A1)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

In reference to claims 20 and 38-41, Clark discloses projecting an image onto a display surface using a projector that comprises a light engine (see paragraph 7 and Figures 1 & 2). Clark discloses correcting the projected image using the “feedback” of the display (see lines 1-3 of paragraph 38). Clark discloses the light engine (#20 of Figure 2) to project image data divided into N subunits onto the display surface (see paragraph 38, lines 3-9). Clark also discloses calculating the average color value from each subunit of image data (see paragraph 38, lines 5-

Art Unit: 2628

7). Note, the Office interprets the image data and average color value of the image data for each subunit of image data functionally equivalent to Applicant's "intended calibration image" and "first color characteristic" respectively. Clark discloses the displayed image being reflected and recorded using an optical unit (see paragraph 20 and #444 of Figure 3). Clark further discloses the projector comprising a processor configured to compare the received reflected average color value to the average desired color value (calculated from the image data being initially divided into N subunits above) or compares the "intended calibration image" and "received calibration image" (received via means of reflection and the optical unit above) (see paragraph 38, last 3 lines and #50 of Figure 3). Clark then applies a correction factor to the image data or light engine thereby allowing a corrected image to be projected from the projector (see paragraph 39, last 8 lines). Note, the Office interprets the processor/projector of Clark to inherently projected the image data onto the display surface when the corrected image data is not projected since Clark's system works upon "feedback" therefore the system is constantly being updated from the previous image displayed. In other words, the current image data becomes the next corrected projected image in Clark. Further in reference to claim 38, Clark further discloses an alternate calibration embodiment whereby points are "painted" onto each corner of the projected image, allowing the processor to map the projected image to the corresponding image data (see paragraph 45, lines 1-5) which the Office interprets as the calibration image forming a "multi-pixel subunit" of the projected image. Further in reference to claim 41, Clark explicitly discloses software instructions embodied on a computer-readable medium for performing the above disclosed projection techniques (see paragraph 46).

In reference to claim 21, Clark discloses all of the claim limitations as applied to claim 20 above in addition, Clark discloses the optical unit to be a CCD, photodiode or other light-sensitive element (see last 3 lines of paragraph 20).

In reference to claim 22, Clark discloses all of the claim limitations as applied to claim 20 above in addition, Clark discloses the projector system to comprise of a memory communicating the processor to serve as a temporary or long-term storage for storing calibration information, color information and other information need by the processor (see last 5 lines of paragraph 10). Note, the Office interprets such memory inherently storing the average color data as calculated by Clark.

*Allowable Subject Matter*

2. Claims 1-19 are allowed.

The following is an examiner's statement of reasons for allowance:

In reference to claim 1, the prior art of record does not explicitly disclose projecting a principal image without a portion of the principal image corresponding to a calibration area and projecting a calibration image onto the calibration area while projecting the principal image without the portion, in combination with the further limitations as applied to claim 1 above.

In reference to claims 2-19, claims 2-19 depend upon allowable claim 1 and are therefore also deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Claims 23-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Response to Arguments*

4. Applicant's arguments, see page 13 of Applicant's Remarks, filed 07/18/06, with respect to the issue of the previous priority claim have been fully considered and are persuasive. The issue regarding the priority claim has been withdrawn since Applicant has removed the priority claim in a previous amendment.

5. Applicant's arguments, see pages 14-17 of Applicant's Remarks, filed 07/18/06, with respect to the 35 USC 102 and 103 rejections of claims 1-19 have been fully considered and are persuasive. The art rejection of claims 1-19 has been withdrawn. Further, Applicant's amendments overcome the previous art rejection based upon Wada.

6. Applicant's arguments, see pages 17-22 of Applicant's Remarks, filed 07/18/06, with respect to the rejection(s) of claim(s) 20-22 and 38-41 under 35 USC 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Clark.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

Art Unit: 2628

**571-273-8300 (Central Fax)**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac



**PATENT EXAMINER**

9/21/06



**KEE M. TUNG  
SUPERVISORY PATENT EXAMINER**